

REMARKS

Summary of the Office Action

Claims 1-18 have been rejected under 35 U.S.C. § 112 as indefinite.

Claims 1, 2, 8-11 and 16-18 have been rejected as anticipated by Forsell WO 01/49245 ("Forsell").

Claims 1, 2, 8, 16 and 17 have been rejected as anticipated by Reimels U.S. Patent No. 4,118,805 ("Reimels").

Applicants' Response

Applicants have obviated the indefiniteness rejections by canceling as-filed claims 1-18 and submitting herewith new claims 19-53, of which claims 19 and 38 are independent. Applicants submit that new claims 19 and 38 patentably distinguish over the prior art Forsell and Reimels references, as well as the additional references made of record in the accompanying Supplemental Information Disclosure Statement.

In particular, claim 19 recites that "the flexible element defin[es] a helical screw thread" and "an actuator **having a nut that engages the helical screw thread**, operation of the actuator **drawing the helical screw thread through the actuator...**" Claim 38 incorporates similar limitations. Support for this recitation is provided in FIGS. 1, 3 and 10; at page 10, line 27 to page 11, line 21; and in as-filed claim 4. As noted in the foregoing portion of the specification, the claimed arrangement provides "good mechanical efficiency", "is low in energy costs" and "guarantees a stable adjustment position even when no energy is provided to the system." None of the prior art teaches nor suggest such an arrangement.

The New Claims Are Patentable Over Forsell

The devices described in Forsell employ dissimilar components, and operate on an entirely different principle than the present invention. FIGS. 7 and 9 of Forsell are reproduced below:

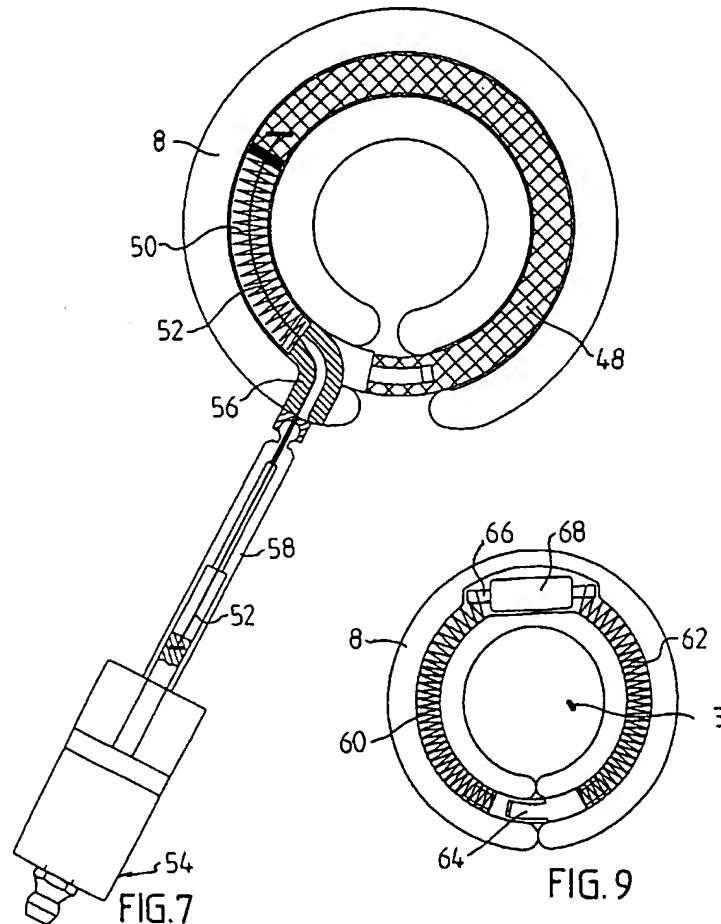


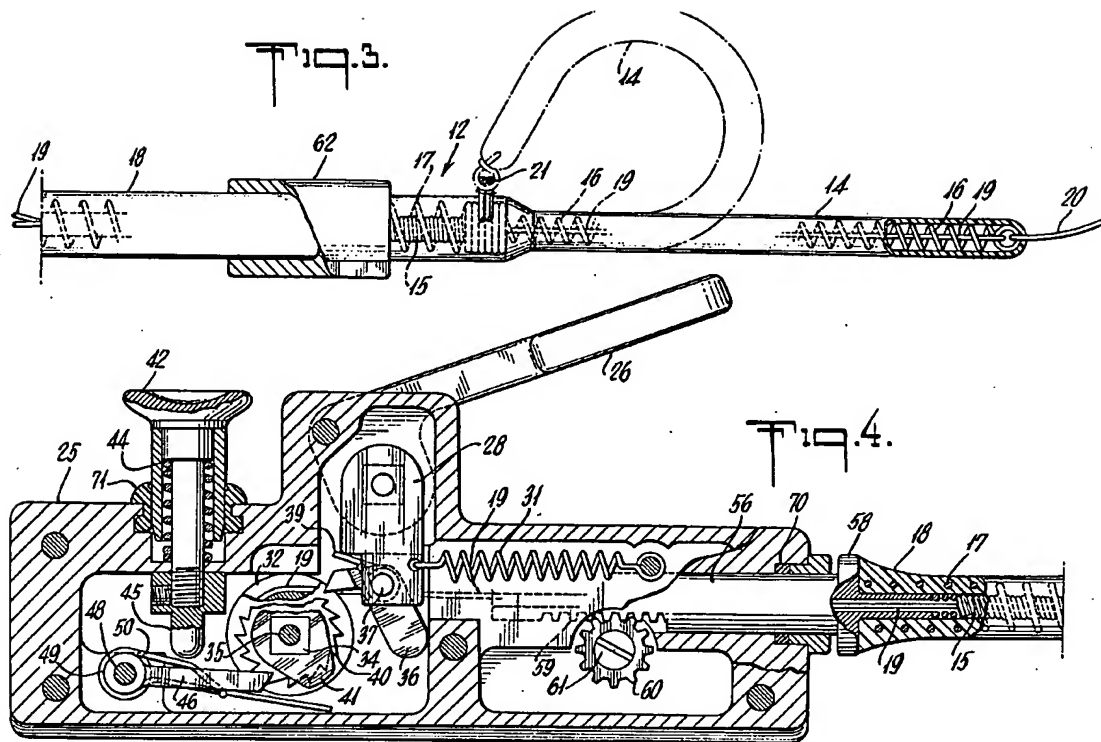
FIG. 7 of Forsell depicts pulling member 52 (e.g., a wire) engaged at one end in flexible core 48, and at the other end with cylinder/piston unit 54. Movement of the piston applies tension to pulling member 52, thereby restricting the diameter of the device. Helical spring 50 is captured between the end of flexible core 48 and arresting member 56, and biases the flexible core to its circumferentially enlarged condition when the tension is removed from pulling member 52.

In the embodiments of FIGS. 9 and 10, Forsell describes helical springs 60 and 62 coupled to drive shafts 66 of motor 68 (FIG. 9) or drive shafts 74 and 76 coupled to gearing 70 (FIG. 10). When the motor is actuated, the drive shafts cause the helical springs to either unwind (thereby increasing the degree of restriction) or wind to a smaller diameter (thereby decreasing the degree of constriction).

Forsell does not teach or suggest the use of a helical screw thread or a nut actuator that is engaged with a helical screw thread. Neither does Forsell teach or suggest the use of an arrangement in which the helical screw thread is drawn through the actuator during operation. In FIG. 7 of Forsell, spring 52 simply biases the flexible core to its expanded state; it is not a "helical screw thread" nor is it "drawn through the actuator" during operation. Likewise, in the embodiments of FIG. 9 and 10 of Forsell, helical springs 60 and 62 do not constitute "helical screw threads", are not engaged with a nut of the actuator, and are not drawn through the actuator during operation. Applicants therefore submit that claims 1 and 38 (and all of the claims that depend therefrom) patentably distinguish over Forsell.

The New Claims Are Patentable Over Reimels

The devices describe in Reimels also employs an entirely different structure, and works on different principles than the present invention. FIGS. 3 and 4 of Reimels are reproduced below:



Looped flexible member 14 comprises compression spring 15 having expanded portion 16 encased in silicone coating 18. Cable 19 extends through the flexible member and is engaged with drum 32, so that operation of lever 26 causes drum 32 to take up cable 19 and apply a tensile force that constricts flexible member 14. See col. 3, line 64 to col. 4, line 62. Rack 59 and pinion 60 are provided to adjust the tension in cable 19 and flexible member 14 using a screw-driver that may be inserted into slot 61 of pinion 60. See col. 5, lines 6-15 and col. 6, lines 37-58.

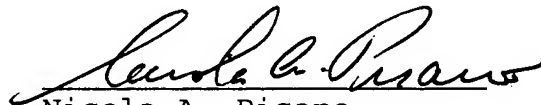
Reimels does not teach or suggest the use of a helical screw thread or a nut actuator that is engaged with a helical screw thread. Neither does Reimels teach or suggest the use of an arrangement in which the helical screw thread is drawn through the actuator during operation. Instead, Reimels teaches the use of cable 19 that is wound on drum 32 to apply constrict

the flexible member. Compression spring 16 simply forms the body of the flexible member, does not function as a "helical screw thread" and is not engaged in a nut actuator are recited in the pending claims. Applicants therefore submit that claims 1 and 38 (and all of the claims that depend therefrom) patentably distinguish over Reimels.

Conclusion

In view of the foregoing amendments and remarks, applicants submit that the present application is in condition for allowance.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Nicola A. Pisano", is written over a horizontal line.

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